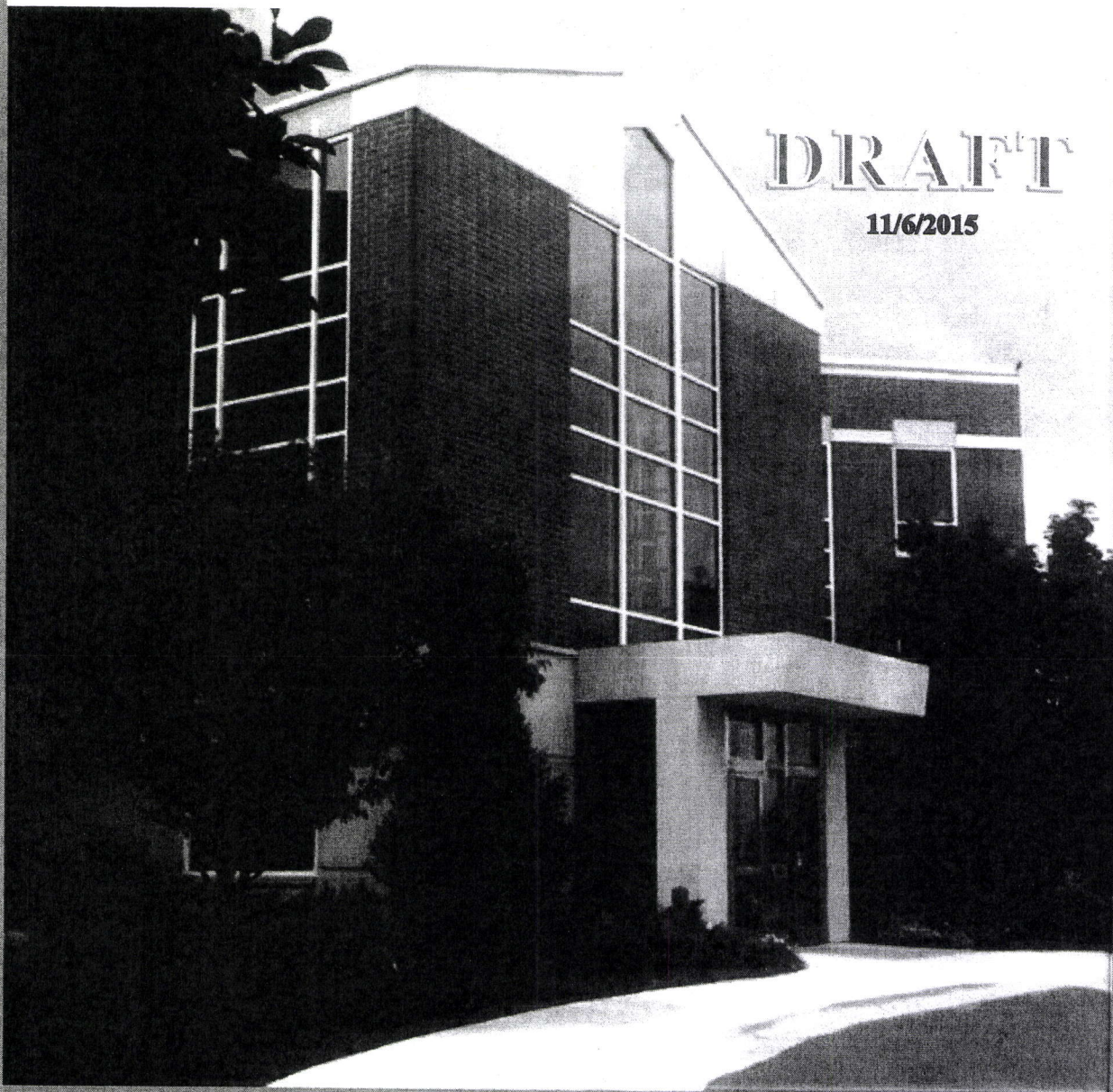


MONTANA

BOARD OF INVESTMENTS



DRAFT

11/6/2015

2015 Annual Report

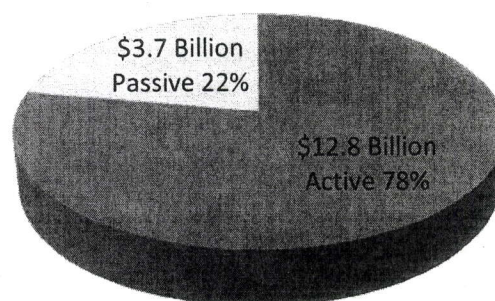
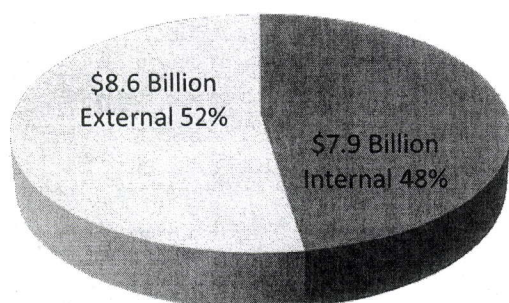
State Administration & Veterans' Affairs
November 17, 2015
Exhibit 1



The Montana Constitution requires that the State's investments fall under the **UNIFIED INVESTMENTS PROGRAM**. The legislature created the Board of Investments to administer this critical program. State law requires the Board to be prudent and meet various requirements. As of June 30, 2015, State investments total over \$16 billion and generally fall into broad categories: state operating, trust funds, pension funds, insurance

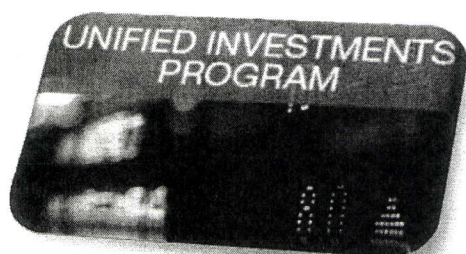
reserves, and certain local government funds. To meet the needs of these four categories, the Board uses a combination of investment pools or when necessary, tailors a specific financial need through individual securities.

In response to two common questions...how much of the over \$16 billion total is internally managed and how much is actively managed, the information is presented in the following charts:



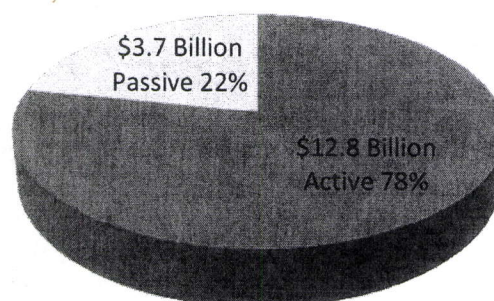
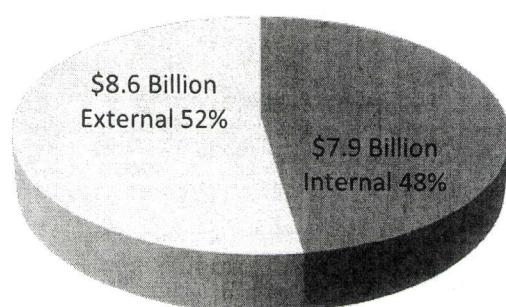
The first chart shows that almost \$7.9 billion is managed in-house by the Board's investment staff. Many of the lower risk assets are internally managed which keeps expenses down. External management is generally used where outside expertise is deemed more advisable. The Board's investment staff chooses the outside investment money managers and closely monitors them to ensure performance meets the Board's investment expectations.

The second chart shows the proportion of 'passive' to 'active' investments. Approximately 78% of the Board's investments are actively managed and 22% are investments that follow both an average market holding of investments and only return the market average. The advantages of active management are more control over investments and generally a better return. Expenses are higher with active selection. Passive selection is generally cheaper; however, some asset classes do not have the option of investing passively.



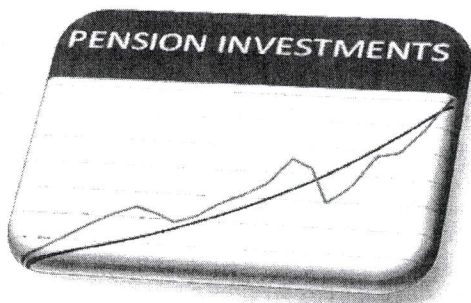
The Montana Constitution requires that the State's investments fall under the **UNIFIED INVESTMENTS PROGRAM**. The legislature created the Board of Investments to administer this critical program. State law requires the Board to be prudent and meet various requirements. As of June 30, 2015, State investments total over \$16 billion and generally fall into broad categories: state operating, trust funds, pension funds, insurance reserves, and certain local government funds. To meet the needs of these four categories, the Board uses a combination of investment pools or when necessary, tailors a specific financial need through individual securities.

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Montana's **STATE PENSIONS** consist of nine separate retirement plans for state and local government employees, with the largest being the Montana Public Employee Retirement Program and the Montana Teachers' Retirement Program. The Board has established a number of different investment pools to meet the investment needs of the retirement plans. The Montana Constitution allows pension funds to be invested in common stock and the Board has created several

investment pools for this purpose. Altogether, pension monies are invested in six different pools: STIP, the Montana Domestic Equity Pool, the Retirement Funds Bond Pool, the Montana International Equity Pool, the Montana Private Equity Pool and the Montana Real Estate Pool.

In managing the state's pension investments, the Board balances many factors: maximize long term growth, analysis of the liquidity needs of plans, limit risks and be cost conscious. Long term growth is mostly driven by holding various types of domestic stocks or other equities such as international stocks, as they tend to provide the greatest return (but bear the greatest risk) over many years. Generating cash is done primarily by holding cash or investments that provide income such as bonds. Limiting risks is best accomplished by holding both a wide mix of investments and knowing generally which ones do not behave the same in an economic downturn (i.e., avoid over concentration of highly correlating-performing investments). Excessive costs substantially reduce returns. The Board is mindful that expenses must be budgeted to maximize value. Certain types of investments are more expensive to hold and manage than others and the Board requires staff to justify more expensive investment strategies. The Board does an annual cost analysis as part of its annual assessment of performance and efficiency.

To obtain an expected positive investment performance requires a long term view, at least 10 years, and accepting that bull and bear markets occur. In practice, this means that news is mostly noise, and that a steady hand, patience, and a professional discipline to rebalance is required. Modern portfolio theory **requires** establishing asset allocation ranges and staying within them even if it requires selling down assets that are performing well and buying into other asset classes.

Almost 90% of total investment performance is driven by asset class allocation. Ranges are determined by the Board, with recommendations from staff. The Board sets a range for each pension asset class, and the staff reports quarterly on how each class is performing and the relative holdings within the permitted ranges. The Board reviews and sets asset allocation ranges at least annually by Board policy.

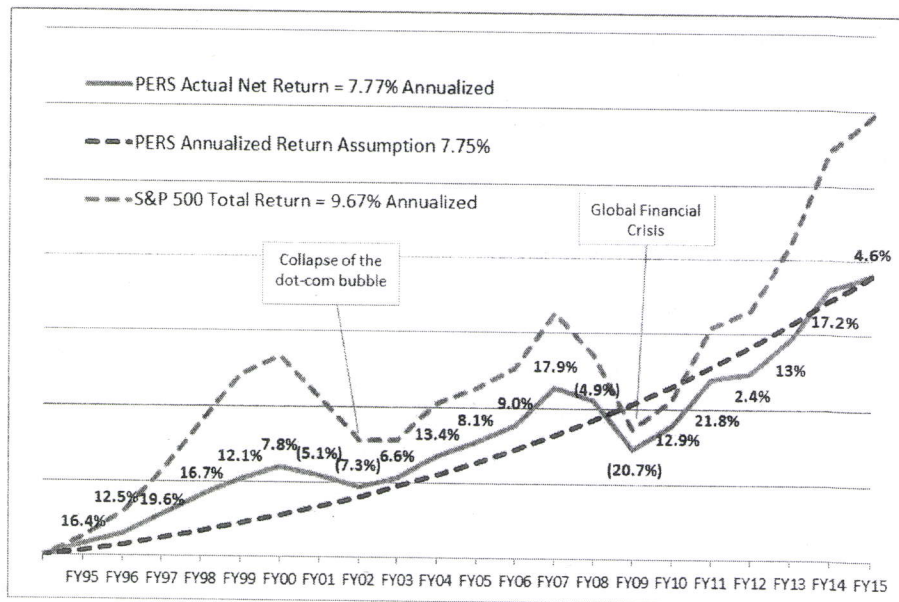
There are many possible investment asset classes and a wide range of possible mixes. In developing its investment rationale, the Board considers the merits of each class: its expected long rate of return, its likely riskiness (generally how volatile are its values), how readily convertible to cash is it (i.e., liquidity), and how it behaves in tandem to all the other asset classes (i.e., correlation). Running various possibilities, the Board determines the asset class ranges to maximize expected investment returns, keep risk within prudent levels, and maintain sufficient liquidity to meet current benefit payments. Some asset classes have been considered but are currently excluded. The Board by policy does not use hedge funds. Commodities and infrastructure investments are not excluded but are not currently part of the Board's asset allocation mix.

Managing Pension Investments requires a skillful balance of:

- Maximizing long term growth
- Analyzing plan liquidity needs
- Limiting risks
- Controlling costs

The chart below shows investment returns for the Public Employees' Retirement System (PERS) since fiscal year 1995. These returns reflect the effects of the total asset allocation of the various investment pool performances, net of fees. The returns for the other eight retirement systems have been nearly identical to the PERS. As shown by the S&P 500 in the chart, economic conditions heavily influence returns.

When considering the combination of assets to invest, the Board works to optimize three broad investment traits: expected return, risk, and historical performance compared to other investment classes in the same time period. The Board uses various simulation models which assign estimated future returns for each investment category, and then summarizes an expected return for the entire investment mix.



Pension Funds 10-Year Comparison Fair Value (In Millions) As of June 30, 2015						
Fund	Fair Value	% of Total	10-Year		Change \$	Change %
			Fair Value	% of Total		
Firefighters Retirement	326.3	3.25	146.7	2.31	179.6	122.46
Game Wardens Retirement	148.0	1.47	51.8	0.82	96.2	185.95
Highway Patrol Retirement	128.2	1.28	83.6	1.32	44.7	53.43
Judges Retirement	86.7	0.86	48.4	0.76	38.3	79.04
Police Retirement	320.8	3.19	153.7	2.42	167.1	108.68
Public Employees Retirement	5,043.6	50.16	3,232.8	50.92	1,810.8	56.01
Sheriffs Retirement	295.0	2.93	151.0	2.38	143.9	95.32
Teachers Retirement	3,673.4	36.53	2,461.2	38.76	1,212.3	49.26
Vol. Firefighters Retirement	33.9	0.34	20.1	0.32	13.8	69.00
Grand Total	10,055.9	100.00	6,349.2	100.00	3,706.7	58.38
Investment Type						
Montana Domestic Equity Pool	3,991.7	39.70	3,009.3	47.40	982.5	32.65
Montana International Pool	1,669.0	16.60	996.5	15.69	672.6	67.50
Montana Private Equity Pool	1,075.4	10.69	297.4	4.68	778.0	261.58
Montana Real Estate Pool	887.6	8.83	16.5	0.26	871.2	5,287.89
Retirement Funds Bond Pool	2,245.3	22.33	1,928.4	30.37	316.9	16.43
Short Term Investment Pool	186.7	1.86	101.1	1.59	85.6	84.67
Grand Total	10,055.9	100.00	6,349.2	100.00	3,706.7	58.38

The Board reviews both absolute return performance and performance to internally established benchmarks. It also uses several external sources to compare the Board's performance with other state and large public pension systems.

The Board's investment performance and costs relative to its peers can be found on the Board's website at: [include web address here].

The Board of Investments manages all pension fund investments through six of the Board's seven investment pools. Each investment pool is governed by a separate investment policy and concentrations into any one pool are limited by the Board's asset allocation policy. Selective return performance of the retirement systems is shown here:

Pension Fund By Investment Pool Fair Value (In Millions) With Time Weighted Annualized Net Returns As of June 30, 2015					
Investment Pool	Fair Value	1-Year Return %	2-Year Return %	10-Year Return %	21-Year Return %*
Montana Domestic Equity Pool (MDEP)	3,991.7	7.35	25.18	7.77	
Montana International Pool (MTIP)	1,669.0	(4.21)	21.67	4.64	
Montana Real Estate Pool (MTRP)	887.6	13.12	11.67		
Montana Private Equity Pool (MPEP)	1,075.4	8.44	16.51	10.55	
Retirement Funds Bond Pool (RFBP)	2,245.3	2.30	5.22	5.32	
Short Term Investment Pool (STIP)	186.8	0.12	0.14	1.70	
All Pension Funds	10,055.9	4.58	17.17	6.59	7.77
*Since inception of current custodial bank records.					

Pension Funds By Investment Pool

